



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,757	06/08/2001	Elizabeth Varriano-Marston	MARS93-DIV	3933

24222 7590 06/04/2004

MAINE & ASMUS  
100 MAIN STREET  
P O BOX 3445  
NASHUA, NH 03061-3445

EXAMINER

PATTERSON, MARC A

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/877,757

Applicant(s)

VARRIANO-MARSTON,  
ELIZABETH

Examiner

Marc A Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1772

## DETAILED ACTION

### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 102(b) rejection of Claims 1 – 4, 8 – 9, 12 – 13 and 21 as being anticipated by Kocher et al (U.S. Patent No. 5,919,547), of record on page 2 of the previous Action, is withdrawn.

The 35 U.S.C. 103(a) rejection of Claims 5 – 6, 14 and 22 as being unpatentable over Kocher et al (U.S. Patent No. 5,919,547), of record on page 3 of the previous Action, is withdrawn.

The 35 U.S.C. 103(a) rejection of Claims 7 and 10 – 11 as being unpatentable over Kocher et al (U.S. Patent No. 5,919,547) in view of Porchia et al (U.S. Patent No. 5,492,705), of record on page 4 of the previous Action, is withdrawn.

### NEW REJECTIONS

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 4, 8 – 9, 12 – 13 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Greengrass et al (U.S. Patent No. 4,886,372).

With regard to Claims 1 and 8, Greengrass et al disclose an improved packaging (bag; column 1, line 21) for establishing optimum atmospheric conditions for respiring produce (a modified atmosphere packaging environment for fruit; column 1, lines 21 – 32) comprising a

Art Unit: 1772

polymeric material (plastics material; column 2, lines 50 – 51) and a set of microperforations (column 2, lines 50 – 52) which are drill holes (made by pins; column 4, lines 30 – 34) on a target area on the polymeric material (a position which eliminates the possibility of product within the pack blocking the microperforation; column 2, lines; 56 – 62), the microperforations controlling the optimum atmospheric conditions within specified oxygen and carbon dioxide concentrations of less than 20.9% oxygen and greater than 0.03 % carbon dioxide (therefore maintaining and controlling the atmospheric conditions within this range; column 1, lines 33 – 38).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 – 4, 9, 12 – 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547).

Greengrass et al disclose a packaging for produce comprising microperforations and a polymeric material as discussed above. With regard to Claim 2, Greengrass et al fail to disclose a polymeric material comprising polyester.

Kocher et al teach a microperforated packaging (column 3, lines 19 – 25) for produce (fruits of vegetables; column 9, lines 14 – 15) comprising polyester (column 15, line 43) for the

Art Unit: 1772

purpose of obtaining a packaging which provides an improved shelf life (column 1, lines 30 – 31). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the packaging comprising polyester of Kocher et al in Greengrass et al, which is a microperforated packaging, depending on the desired shelf life of the end product as taught by Kocher et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the packaging of Kocher et al in Greengrass et al in order to obtaining a packaging which provides an improved shelf life as taught by Kocher et al.

With regard to Claim 3, the polymeric material taught by Kocher et al is heat – sealable (heat – weldable; column 4, lines 5 – 9).

With regard to Claim 4, the polymeric material taught by Kocher et al has a thickness in the range of 0.4 to 8 mil (column 17, lines 11 – 16).

With regard to Claim 9 the packaging taught by Kocher et al is comprised in a lid, as stated above, therefore in a semi – rigid container.

With regard to Claim 12, the film taught by Kocher et al is gas – permeable, as stated above, and is therefore not occluded.

With regard to Claims 13 and 21, the microperforations taught by Kocher et al have an average diameter of 125 microns (column 17, lines 66 – 67).

With regard to Claims 5 – 6, 14 and 22, Kocher et al fail to disclose a packaging material providing an oxygen flux ranging from 200 cc/day – atm to 1,500,000 cc/day – atm, and a carbon dioxide transmission rate that is 3.4 to 4.0 times greater than the oxygen transmission rate.

Art Unit: 1772

However, Kocher et al disclose a packaging material providing an oxygen flux (column 17, lines 66 – 67; column 18, lines 1 – 5), and a carbon dioxide transmission rate (the packaging also provides a carbon dioxide flux; column 17, lines 66 – 67; column 18, lines 1 – 5), and teaches the selection of microperforation size depending on the desired passage of atmospheric gas, including oxygen and carbon dioxide (column 18, lines 1 – 3). Therefore, one of ordinary skill in the art would have recognized the advantage of varying the microperforation size to obtain a desired oxygen flux and carbon dioxide transmission rate. Therefore, the oxygen flux and carbon dioxide transmission rate would be readily determined through routine optimization of microperforation size by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the thickness in order to obtain a desired oxygen flux and carbon dioxide transmission rate, since the oxygen flux and carbon dioxide transmission rate would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Kocher et al.

6. Claims 7 and 10 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and further in view of Porchia et al (U.S. Patent No. 5,492,705).

Greengrass et al and Kocher et al disclose a microperforated packaging as discussed above. With regard to Claims 7 – 10, Greengrass et al and Kocher et al fail to disclose a microperforated packaging which is a bag which is substantially enclosed with a top seal, a

Art Unit: 1772

bottom seal and a pair of side seals having the target area within one – quarter distance from the top seal.

Porchia et al teach the use of microperforated packaging in a bag (therefore providing top sealing, bottom sealing and side sealing; column 2, lines 50 – 60) for the purpose of controlling the weight loss of fruit stored in the bag (column 2, lines 50 – 60); the microperforations are within one quarter of the top seal (Figure 1). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the bag of Porchia et al in Greengrass et al and Kocher et al which comprises microperforated packaging, depending on the desired control of weight loss of fruit stored in the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a bag having microperforations within one quarter of the top seal in Greengrass et al and Kocher et al in order to control the weight loss of fruit as taught by Porchia et al.

#### ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 1 – 4, 8 – 9, 12 – 13 and 21 as being anticipated by Kocher et al (U.S. Patent No. 5,919,547), 35 U.S.C. 103(a) rejection of Claims 5 – 6, 14 and 22 as being unpatentable over Kocher et al (U.S. Patent No. 5,919,547) and 35 U.S.C. 103(a) rejection of Claims 7 and 10 – 11 as being unpatentable over Kocher et al (U.S. Patent No. 5,919,547) in view of Porchia et al (U.S. Patent No. 5,492,705), of record in the previous Action, have been and have been found to be persuasive. The rejections are therefore withdrawn. The new 35 U.S.C. 102(b) rejection of Claims 1 – 4, 8 – 9, 12 – 13 and

Art Unit: 1772

21 as being anticipated by Greengrass et al (U.S. Patent No. 4,886,372), 35 U.S.C. 103(a) rejection of Claims 2 – 4, 9, 12 – 13 and 21 as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and 35 U.S.C. 103(a) rejection of Claims 7 and 10 – 11 as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and further in view of Porchia et al (U.S. Patent No. 5,492,705) above are directed to amended Claims 1 – 14 and 21 – 22.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Art Unit: 1772

**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (571) 272 – 1497. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571) 272 – 1498. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

*Marc Patterson*  
Art Unit 1772

*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

6/1/04